

WHAT IS CLAIMED IS:

1. An immune response altering composition comprising purified immune complexes capable of altering the immune response of a non-human, vertebrate patient.
- 5           2. The immune response altering composition of claim 1 further comprising immunity enhancing factors.
3. The immune response altering composition of claim 1 further comprising cells, removed from said patient and treated, in vitro, with said purified immune complexes.
- 10           4. The composition of claim 1 wherein said patient is selected from the group consisting of birds, reptiles, aquaculture, mammals; poultry, pet animals, companion animals, and livestock.
5. A method of altering the immune response of a non-human, vertebrate patient comprising administering to said patient a therapeutically effective amount of  
15 a composition comprising purified immune complexes.
6. The method of claim 5 wherein said composition further comprises immunity enhancing factors.
7. The method of claim 5 wherein said composition further comprises cells, removed from said patient and treated, in vitro, with said purified immune complexes.
- 20           8. The method of claim 5 wherein said patient is selected from the group consisting of birds, reptiles, aquaculture, mammals; poultry, pet animals, companion animals, and livestock.
9. A process for the removal of immune complexes from the plasma of a non-human, vertebrate patient comprising placing receptors and receptor complex  
25 fractions on a suitable support and contacting said active receptor and receptor complex fractions with said plasma such that at least some of said immune complexes bind said active receptor and receptor complex fractions.

10. The process of claim 9 further comprising the step of removing said plasma from said patient prior to contacting said plasma with said active receptor and receptor complex fractions and returning said plasma to said patient after contacting said plasma with said active receptor and receptor complex fractions.

5           11. The process of claim 9 wherein said patient is selected from the group consisting of birds, reptiles, aquaculture, mammals; poultry, pet animals, companion animals, and livestock.

12. A process for the creation of a database useful for storing and retrieving analytical information, which comprises loading and storing analytical information  
10 regarding purified immune complexes associated with one or more specific diseases, wherein said immune complexes are from non-human, vertebrate patients.

13. The process of claim 12 wherein said patient is selected from the group consisting of birds, reptiles, aquaculture, mammals; poultry, pet animals, companion animals, and livestock.

15           14. A device for the removal of immune complexes from a non-human, vertebral patient comprising:

          a first venous connection capable of accessing the blood in a patient's venous system;

          a blood cell separator operably connected to said first venous connection  
20 wherein said separator is capable of separating the patient's blood into plasma and blood cells, said plasma containing immune complexes;

          a capture element in fluid communication with said separator and adapted to receive said plasma, wherein said capture element comprises a suitable support and active receptor and receptor complex fractions attached to said support; and

25           wherein when said active receptor and receptor complex fractions are brought into contact with said plasma, at least some of the immune complexes bind said active receptors and receptor complex fractions and are thereby removed from the plasma.

15. The device of claim 14 further comprising a second connection to said patient's venous system, said second connection in fluid communication with said capture element and adapted to return said plasma, having at least some immune complexes removed therefrom, to said patient.

5           16. The device of claim 14 wherein said first venous connection is specially adapted to access the blood in the venous system of a non-human, vertebrate patient.

17. A diagnostic kit to aid in the diagnosis of at least one disease in a non-human, vertebrate patient, comprising:

active receptors and receptor complex fractions attached to a suitable support,

10           wherein said support is adapted to receive the blood plasma of a patient and to place said plasma in contact with said active receptors and receptor complex fractions;

wherein when said active receptors and receptor complex fractions are put into contact with plasma from a non-human, vertebrate patient, immune complexes within said plasma bind said receptors and receptor complex fractions;

15           at least one disease specific reagent adapted to react with bound immune complexes and thereby indicate the presence of immune complexes associated with at least one specific disease; and

instructions for proper use of the kit.

20           18. A method for diagnosing at least one disease in a non-human vertebrate patient comprising:

providing active receptors and receptor complex fractions attached to a suitable support, said support adapted to receive the blood plasma of a patient;

placing said plasma in contact with said active receptors and receptor complex fractions,

wherein when said active receptors and receptor complex fractions are put into contact with said plasma, immune complexes within said plasma bind said receptors and receptor complex fractions;

5       contacting said bound immune complexes with at least one disease specific reagent adapted to react with said immune complexes thereby indicating the presence of immune complexes associated with a at least one specific disease.

19. The method of claim 18 wherein said patient is selected from the group consisting of birds, reptiles, aquaculture, mammals; poultry, pet animals, companion animals, and livestock.

10       20. The method of claim 18 further comprising the step of identifying the antigens, present in the immune complexes, and associating said antigens with at least one disease.